

The Oasis

Saturday, Nov. 11, 1899.

New Cyanide Plant at Las Amarillas.

Work upon the new cyanide plant of the "Minas Prietas Reduction Syndicate, Limited," at La Colorada, is progressing as rapidly as men and money can push things, and it is now so far advanced that the ordinary observer can see that it will be a stupendous plant.

The process to be used is known as the Siemens-Halske process, and has been very successfully operated in South Africa. It differs from other cyanide processes in that the gold and silver in the tailings and ores treated are precipitated upon sheets of lead, the lead being afterward separated and recast into sheets for use again, using the same lead over and over, where by other processes the precipitation is upon zinc, which is lost in smelting—a great saving in cost of operation.

The company has taken a contract to work over the great bed of tailings which has accumulated at the Amarillas mill—at that part of La Colorada known as Las Amarillas—and at the same time to take all the tailings running from the mill. As the mill discharges 200 tons daily, and another 200 tons from the dumps are to be daily treated, the plant is being erected with a diurnal capacity of 400 tons. From the mill the tailings will be carried into the bins directly, from the dumps by a wire rope tramway. In the bins the tailings are separated by gravity into two kinds, "sands" and "slimes." The slimes are run into a machine of German invention called "spitzkasten," which extracts the water, returning it to the mill for use. From the "spitzkasten" the slimes go to the stirring tanks. The sands go directly to the tanks from the bins. The stirring tanks will be eight large vats thirty-four feet in diameter and twelve feet deep, in which the cyanide solution is mixed with the slimes and sands by mechanical agitation, great paddles driven by steam power revolving constantly through the mass bringing every particle of gold and silver in contact with the cyanide, which takes it up. So effectively is the work done that ninety-five per cent of the values in gold and silver are saved from the tailings. When the values are all taken up the cyanide solution is run from the tanks into the precipitating boxes, and the exhausted slimes and sands in the tanks are dropped through the bottoms of the stirring tanks into channels underneath through which they are conveyed to the waste dumps. In the precipitating boxes the cyanide solution runs over sheets of lead upon which the gold and silver in the solution are precipitated by chemical affinity. The sheets of lead are taken to the refinery where the gold and silver and separated from the lead, the precious metals run into bars and the lead into sheets to be returned to the precipitating boxes for further use.

The plant is being erected upon a side hill, cut into terraces, the operation being by gravity almost entirely. Upon the lower terrace is the building in which are to be placed the engine and boilers, the precipitating tanks, and the refinery. This structure, 194x40 feet, is a single story in height, of heavy frames covered with corrugated iron, on the roof, sides and ends. This structure was recently erected within five days. A smaller building on the same terrace is for the assay office. Upon the terrace next above are to be the eight large stirring tanks, each with a capacity of fifty tons daily. The foundations for the tanks and the cement channels

beneath for conveying away the exhausted slimes and sands are now in course of construction and the staves for the tanks are being made in a saw and planing mill which has been put into operation right at hand. Each stave is of redwood, three inches thick, eight inches wide and over twelve feet long. The staves are sawed, planed and checked by machinery, some of which was especially imported from Scotland. Above the stirring tanks will be placed the spitzkasten, and above that the receiving bins. When completed the plant will be one of the largest cyanide reduction works in the world, and the largest on the western hemisphere.

The work is progressing as rapidly as possible, but is hampered on account of scarcity of labor. Good mechanics are wanted, and four dollars per day in gold is paid carpenters.

The company is a strong one, backed by heavy English capital; Mr. C. A. Butters of London, is managing director. The local officials are J. Johnston, engineer in charge; J. Frier, superintendent of construction; M. F. Parry, local secretary; H. F. Durrant, metallurgist.

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Ely's Cream Balm is the acknowledged cure for catarrh and contains no mercury nor any injurious drug. Price, 50 cents.

NOTICE FOR PUBLICATION.

(Homestead Application No. 2924.)
DEPARTMENT OF THE INTERIOR,
LAND OFFICE AT TUCSON, ARIZONA.
October 26, 1899.

Notice is hereby given that the following named settler has filed notice of his intention to make final proof in support of his claim, and that said proof will be made before the Register and Receiver at Tucson, Arizona, on Monday, December 11, 1899, viz: Jose Maria Peralta, of Tucson, Arizona, for the n. e. 1/4, sec 13, T 20 S., R 13 E., G. & S. R. B. & M. He names the following witnesses to prove his continuous residence upon and cultivation of said land, viz: Juan Teiles and Teodoro Rivera, of Tucson, Arizona, and Dario Martinez and Manuel Morales, of Calabasas, Arizona.

MILTON R. MOORE,
Register.

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ALBERT J. SHARPE. B. S., M. E.
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AND
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